

Bayer Environmental Science

**Material Safety Data Sheet**
SUSPEND® SC INSECTICIDE

MSDS Number: 102000003167

MSDS Version 2.2

Revision Date: 01/29/2007

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name SUSPEND® SC INSECTICIDE
MSDS Number 102000003167

Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)
For Product Information call: 1-800-331-2867

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Deltamethrin	52918-63-5	4.75
1,2-Propanediol	57-55-6	15.20

SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview Caution! Hazard to humans and domestic animals. Harmful if inhaled. Do not breathe vapours or spray mist. Contact with product may result in transient tingling and reddening of the skin. Remove and wash contaminated clothing before re-use.

Physical State liquid suspension
Odor none
Appearance white
Routes of Exposure Inhalation, Skin contact

Immediate Effects
Skin Contact with product may result in transient tingling and reddening of the skin.
Inhalation Harmful if inhaled. Do not breathe vapours or spray mist.

Potential Environmental Effect Extremely toxic to fish and aquatic invertebrates.

SECTION 4. FIRST AID MEASURES

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General	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Skin	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Notes to Physician Treatment	There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5. FIRE FIGHTING MEASURES

Flash point	not applicable
Suitable Extinguishing Media	Carbon dioxide (CO ₂), Dry chemical, Foam, Water
Fire Fighting Instructions	<p>Fight fire from upwind position. Evacuate personnel to safe areas. Cool closed containers/ tanks exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.</p> <p>Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.</p>

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces. In case of spill, leak or emergency, use a NIOSH approved chemical cartridge-type respirator.
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Methods for Cleaning Up Dike area to prevent runoff. Collect and transfer the product into a properly labelled and tightly closed container. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Decontaminate tools and equipment following cleanup.

Additional Advice Isolate area. Contaminated soil may have to be removed and disposed.

SECTION 7. HANDLING AND STORAGE

Handling Procedures Avoid contact with skin, eyes and clothing. Handle and open container in a manner as to prevent spillage. Smoking, eating and drinking should be prohibited in the application area.

Storing Procedures Store in original container. Do not contaminate water, food, or feed by storage or disposal. Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed.

Work/Hygienic Procedures Handle in accordance with good industrial hygiene and safety practice. Recommendations for exposure control/personal protection are intended for the manufacture, formulation and packaging of the product.

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove and wash contaminated clothing before re-use.

Min/Max Storage Temperatures no data available

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection Train employees in safe use of the product. Eye wash facility and safety shower should be available. Follow all label instructions.

Engineering Controls Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Eye/Face Protection Chemical resistant goggles must be worn.

Hand Protection Chemical-resistant gloves made of waterproof material such as neoprene, butyl rubber, barrier laminate or nitrile rubber.

Respiratory Protection When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Exposure Limits

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Pyrogenic (fumed)
amorphous silica

112945-52-5

Z3

TWA

20 millions of particles per
cubic foot of air
0.8 mg/m³

Z3

TWA

Remarks

The value is calculated from
a specified equation using a
value of 100%. Values lower
than 100% will give higher
exposure limits. See
regulation for specific
equation.

1,2-Propanediol

57-55-6

WEEL

TWA

Form of exposure

Aerosol. 10 mg/m³

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white
Physical State	liquid suspension
Odor	none
pH	6.6 suspension in water ≤ 7.0 (100 %) at 20 °C
Specific Gravity	1.05 at 20 °C
Density	approx. 1.053 g/cm ³ at 20 °C
Boiling Point	no data available
Melting / Freezing Point	no data available
Water solubility	immiscible
Minimum Ignition Energy	no data available
Viscosity	165 mPa.s at 20 °C

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Incompatibility	Strong oxidizing agents strong reducing agents
Hazardous Decomposition Products	Thermal decomposition can lead to release of: Carbon monoxide



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Carbon dioxide (CO₂)

SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been conducted on this product as formulated. The non-acute information pertains to the active ingredient, deltamethrin technical.

Acute Oral Toxicity	male/female combined rat: LD50: > 15,000 mg/kg
Acute Dermal Toxicity	male/female combined rabbit: LD50: > 10,000 mg/kg
Acute Inhalation Toxicity	male/female combined rat: LC50: > 1.02 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol. (actual)
	male/female combined rat: > 4.08 mg/l Exposure time: 1 h Determined in the form of a respirable aerosol. Extrapolated from the 4 hr LC50. (actual)
Skin Irritation	rabbit: No skin irritation.
Eye Irritation	rabbit: No eye irritation.
Sensitization	guinea pig: Non-sensitizing.
Chronic Toxicity	Deltamethrin caused neurobehavioral effects (e.g., tremors) in chronic toxicity studies in rats and dogs.

Assessment Carcinogenicity

Deltamethrin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

Deltamethrin

52918-63-5

Overall evaluation: 3

OSHA

None.

**Reproductive &
Developmental Toxicity**

REPRODUCTION: Deltamethrin was not a reproductive toxicant in multi-generation reproduction studies in rats.

DEVELOPMENTAL TOXICITY: Deltamethrin was not a primary developmental toxicant in developmental toxicity studies in rats and rabbits. Developmental effects (e.g., delayed ossifications) were observed in rabbits at the high-dose but

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were considered secondary to maternal toxicity.

Neurotoxicity

Deltamethrin caused neurobehavioral effects (e.g., tremors) without correlating neuropathological changes in acute and subchronic neurotoxicity screening studies in rats.

Mutagenicity

Deltamethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to Fish

Oncorhynchus mykiss (rainbow trout)

LC50: 0.00026 mg/l

Exposure time: 96 h

Bluegill sunfish

LC50: 0.00017 mg/l

Exposure time: 96 h

Acute Toxicity to Aquatic Invertebrates

Eastern Oyster

LC50: 0.0082 mg/l

Exposure time: 96 h

Mysidopsis bahia (mysid shrimp)

LC50: 0.000001 mg/l

Exposure time: 96 h

Toxicity to other organisms

Bobwhite quail

LD50: > 2,250 mg/kg

Bobwhite quail

LC50: > 5,620 ppm

Mallard duck

LC50: 8,039 ppm

Stability in water

Half life: 55 - 65 h

pH: 9.0

Bioaccumulation

Bluegill sunfish BCF: 189 - 3,930

Environmental Precautions

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other water unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. For guidance, contact your State Water Board or Regional Office of the EPA. Retain and dispose of contaminated wash water.

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SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal
Guidance

Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal regulations.

Follow advice on product label and/or leaflet. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal

Triple rinse containers. Puncture container to avoid re-use. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke.

SECTION 14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not DOT regulated

NOTE: For transport purposes (49 CFR Part 173.132), the calculated 1-Hour LC50 (Rat) is: 4.08 mg/l.

SECTION 15. REGULATORY INFORMATION

US Federal Regulations

TSCA list

1,2-Propanediol 57-55-6

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

1,2-Propanediol 57-55-6 MN, RI

Canadian Regulations

Canadian Domestic Substance List

1,2-Propanediol 57-55-6

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CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Deltamethrin

52918-63-5

1,2-Propanediol

57-55-6

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1

Flammability - 0

Reactivity - 0

Others - none

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: Updated for general editorial purposes.

Revision Date: 01/29/2007

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